#### **TEST INFORMATION GUIDE**

This test information guide provides a summary of concepts that are tested on the written (multiple choice) examination for the **Forensic Scientist Trainee (Option B)** job. This information can be reviewed in combination with the class specification and examination announcement to assist you in preparing for the examination.

#### I. WRITTEN COMMUNICATION SKILLS

(10 Questions)

(Form C: 2001)

This section presents questions to test your ability to prepare written reports of analytical findings of examination results. It is crucial that employees submit reports that are well crafted and accurate as they are submitted to various law enforcement agencies for subsequent criminal prosecutions. Test question topics include:

- Identifying correctly spelled words from a group of correctly and incorrectly spelled words;
- Determining which sentence from a group of four represents the best use of grammar and syntax;
- Appropriate use of punctuation in sentences.

# II. READING COMPREHENSION SKILLS

(10 Questions)

This section tests a critical competency of the job. Employees must be able to read, comprehend and interpret information obtained from books, journals, periodicals and other literature in order to enhance and maintain their knowledge and expertise in various scientific fields. The questions in this examination section test your ability to read and comprehend written information by giving you passages to read and asking you to interpret the information presented in the passage.

## III. ANALYTICAL PROBLEM SOLVING SKILLS

(16 Questions)

Employees in this job must examine evidence for the purpose of identifying and/or eliminating specific objects by the use of specific examination methods. Employees are also responsible for examining items of evidence utilizing techniques for the purpose of identifying weapons, tools, biological specimens, presence of blood, body fluid, drugs, poisons, etc. The questions in this section test your ability to make logical, factual decisions, draw accurate conclusions and impartially judge the merits of collected evidence. Test question topics include:

- General reasoning ability based on logic;
- Reasoning ability based on supplied data.

- OVER -

Creation Date: 18-Sep-03

tdv:DS/sg:SM

## IV. LABORATORY SCIENCE

(10 Questions)

Employees in this job must examine items of evidence utilizing microscopic, chemical and analytical techniques for the purpose of identifying or eliminating potential evidence. Employees are also responsible for the routine maintenance of safety and laboratory equipment and analytical instruments and for performing calibration and safety checks on examination equipment. The questions in this section test your knowledge of common laboratory practices and procedures. Test question topics include:

- Accurate measurement of liquids;
- Chemical characteristics of fluids (pH levels; viscosity; etc.);
- Characteristics of light and wavelengths;
- Using laboratory measurements such as milligrams, kilograms, etc.

#### V. PATTERN RECOGNITION SKILLS

(16 Questions)

Employees in this job examine and compare latent finger and palm prints for the purpose of identifying and/or eliminating specific persons. Employees also perform physical match examinations, e.g., bloodsplatter, and other various interpretations. The questions presented in this test section require you to view patterns of letters and/or symbols and identify similarities or differences.

### VI. BASIC CHEMISTRY

(24 Questions)

Employees in this job must have a basic knowledge of chemistry principles in order to conduct examinations to identify and/or determine the amount of substances present in a sample of evidence as well as to interpret examination findings. Employees often utilize chemical and specialized techniques such as infrared or mass spectrometry to determine a substance's qualitative and quantitative content. This final section of the exam presents questions to test your command of basic chemical knowledge and principles. Test question topics include:

- Chemical composition of various substances;
- Determining molecular weights and atomic numbers;
- Understanding chemical formulas;
- Understanding pH levels;
- Interpreting chemical symbols;
- Differentiating between the weight of an object and its mass.